

REPORT ON INSPECTION TO DETERMINE  
COMPLIANCE WITH THE TCDD WASTE  
STORAGE AND DISPOSAL REGULATIONS

NALCO CHEMICAL COMPANY  
6216 WEST 66TH PLACE  
CHICAGO, ILLINOIS 60638

AUGUST 26, 1982

Performed by:

U.S. ENVIRONMENTAL PROTECTION AGENCY  
TOXIC MATERIALS BRANCH  
230 SOUTH DEARBORN STREET  
CHICAGO, ILLINOIS 60604

EPA Region 5 Records Ctr.



308739

REFERENCE *EPA FILES*  
SITE NAME *Nalco Chem*  
SITE ID *Bedford Park, IL*  
WSI 05-1L-0212

## TCDD COMPLIANCE INSPECTION REPORT

### I. COMPANY IDENTIFICATION

Nalco Chemical Company  
6216 West 66th Place  
Chicago, Illinois 60638  
(312) 496-5000

#### RESPONSIBLE OFFICIAL

Mr. Edgar L. Moodie, Process Engineering Superintendent

### II. DATE OF INSPECTION

August 26, 1982

### III. PARTICIPANTS

#### Company

Mr. Eugene Klosak, Plant Manager  
Mr. Edgar L. Moodie, Process Engineering Superintendent

#### U.S. EPA, Region V

Ms. Carolyn S. Hesse, Environmental Scientist (Author), 5HT-TUB

### IV. OBJECTIVES

The inspection was conducted to document the company's TCDD (tetra-chlorodibenzo-p-dioxin) storage and disposal practices and to determine its compliance with regulations regarding Storage and Disposal of Waste Material; Prohibition of Disposal of Tetrachlorodibenzo-p-Dioxin, 40 CFR Part 775, as published in the Federal Register, Vol. 45, No. 98, May 19, 1980.

### V. COMPANY BACKGROUND

Nalco Chemical Company produces a variety of chemicals and related products. Prior to this inspection, this company reported to U.S. EPA under this regulation that it was disposing of a pesticide product containing 2,4,5-trichlorophenol which might have been contaminated with TCDD (Attachments 1,2 and 3). It was determined that this notification was not necessary because pesticide products are not regulated under TSCA.

This company was selected for a TCDD inspection based on a neutral inspection scheme.

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VI. INSPECTION SUMMARYA. Opening Conference

The inspector presented her credentials, Notice of Inspection, and TSCA Inspection Confidentiality Notice to Mr. Eugene J. Klosak, Plant Manager, and Mr. Edgar L. Moodie, Process Engineering Superintendent (Attachments 4 and 5). The scope and objectives of the inspection were explained, and the requirements of the TCDD storage and disposal regulation were discussed. The inspection covered manufacturing and processing of 2,4,5-TCP (2,4,5-trichlorophenol) and its pesticide derivatives and the facility's waste handling and disposal practices. A Receipt for Samples and Documents was given later for documents received during the inspection (Attachment 6).

B. Determination of Applicability

The company was aware of the TCDD regulation prior to the inspection. Mr. Moodie was given a copy of the Federal Register, Vol. 45, No. 98, pp. 32676-32687, Storage and Disposal of Waste Material; Prohibition of Disposal of Tetrachlorodibenzo-P-Dioxin, 40 CFR Part 775.

This facility has never manufactured 2,4,5-TCP or its pesticide derivatives. However, Nalco formulated products containing TCP during the years 1977, 1978 and 1979. During mid-July 1980, Nalco shipped its remaining TCP stock (900 pounds) to Action Associates. (See attached documentation; Attachment 7).

Nalco Chemical previously produced four pesticide products from sodium 2,4,5-trichlorophenate. This product was in the form of flakes. The total amount of sodium 2,4,5-trichlorophenate in stock on an annual basis follows:

Year 1977	142,000 lbs.	2,4,5-TCP
1978	80,750 "	"
1979	54,000 "	"
1980	900 "	"
1981	0 "	"
1982	0 "	"

The following products were formulated from the TCP flakes in each of the indicated years:

Nalco 322 - EPA Reg. No. 1706-33 (Contains 10% TCP)

Year 1977	207,000 lbs. produced
1978	155,000 " "
1979	78,000 " "
1980	0 " "
1981	0 " "
1982	0 " "

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## Nalco 7323 - EPA Reg. No. 1706-81 (Contains 6.4% TCP)

Year 1977	78,500	lbs. produced	
1978	80,400	"	"
1979	35,600	"	"
1980	0	"	"
1981	0	"	"
1982	0	"	"

## Nalco 7623 - EPA Reg. No. 1706-99 (Contains 10.6% TCP)

Year 1977	101,000	lbs. produced	
1978	108,000	"	"
1979	68,000	"	"
1980	0	"	"
1981	0	"	"
1982	0	"	"

Nalco 7631 - EPA Reg. No. 1706-27 (Also called Nalco 201)  
(Contains 8.0% TCP)

Year 1977	833,000	lbs. produced	
1978	495,000	"	"
1979	372,000	"	"
1980	0	"	"
1981	0	"	"
1982	0	"	"

The typical batch size is 100,000 pounds.

Part of the TCP flakes were shipped to Nalco Chemical Company's Garyville, Louisiana plant for processing. The amounts shipped follow:

Year 1977	35,000	lbs. shipped	
1978	7,100	"	"
1979	5,000	"	"
1980	0	"	"
1981	0	"	"
1982	0	"	"

C. Manufacturing Process

Nalco Chemical Company has not manufactured trichlorophenol or its pesticide derivatives.

D. Facility Waste Handling

The facility estimates that 400 pounds of product is lost as fugitive loss per 100,000-pound batch. These losses are considered to be yield losses. The standard yields for the following products were:

Nalco 322	98%
Nalco 7323	98%
Nalco 7631	95%
Nalco 7623	98%

REFERENCE *EPA Files*  
 SITE NAME *Nalco Chem*  
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In addition, some residual products may be disposed of as wastes. These product-wastes are generally placed in 55-gallon drums and consist of "off-spec." products (due to age of product, customer abuse, etc.). The "off-spec." products are tested, and if no market exists for them or they cannot be put back into production, they are landfilled. The company uses the RCRA manifest system to track the "off-spec." products. The waste material that was sent to Chemical Waste Management in Emelle, Alabama, about which EPA was notified, was "off-spec." product.

The fugitive wastes from product formulation are treated at Nalco's waste treatment plant. This treatment plant receives all of Nalco's wastes and treats the wastes for oil and solids. The water layer of the treated waste goes to the Metropolitan Sanitary District of Greater Chicago. The sludge is collected in a tank at the facility. The tank holds approximately 45,000 gallons of sludge. About once a week 5 to 8 5,000-gallon tank trucks remove the sludge and transport it to the CID landfill in Calumet, Illinois.

Mr. Moodie estimated that this facility produced the following amounts of wastes, which were disposed of at the CID landfill:

Year	Total Volume of Sludge/Year		TCP Lost** in Pounds
	Gallons	Pounds*	
1977	1,453,000	13,077,000	4,500
1978	2,199,000	19,791,000	3,100
1979	2,184,000	19,656,000	2,070
1980	2,476,000	22,284,000	0

\*The sludge weighs about 9 pounds per gallon.

\*\*Estimated TCP lost into sludge. Estimation based on mass-balance calculations.

Due to the frequency of disposal, individual dates of disposal activities were not obtained during the inspection. However, the company claims that it has records and copies of manifests from each of its shipments of wastes to the CID landfill.

#### E. Testing

Nalco Chemical Company has not tested its wastes for the presence of TCDD.

#### F. Notification

The facility notified EPA on November 6, 1981, that it planned to dispose of "off-spec." product (see above). It was determined, at that time, that the materials for disposal were pesticide products which are not regulated under TSCA.

#### G. Sampling

No samples were collected.

REFERENCE *EPA FILES*  
 SITE NAME *Nalco Chem*  
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 WSI *05-11-0212*

VII. FINDINGS AND CONCLUSIONS

From the information obtained during the inspection and submitted by the company (Attachment 7), it appears that this facility is in compliance with the regulation on TCDD Waste Storage and Disposal, 40 CFR Part 775, because the facility has not disposed of TCP-related wastes since the effective date of the regulation.

REFERENCE EPA FILES  
SITE NAME Nalco Chem  
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## NALCO CHEMICAL COMPANY

6216 WEST 66TH PLACE • CHICAGO, ILLINOIS 60638 • AREA 312-496-5000

September 3, 1981

Mr. Gordon Olson  
Office of Pesticides and Toxic Substances  
U.S. Environmental Protection Agency  
401 M Street, S.W.  
Washington, D.C. 20460

Dear Mr. Olson:

We have on hand seventeen 55-gallon drums of obsolete products containing from 6 to 10% 2,4,5-trichlorophenol. We have applied to Waste Management, Inc., for approval to dispose of these materials at their landfill at Emelle, Alabama (EPA ID ALT000622464). This letter is to notify you of our intent to dispose of the materials, as required by 40 CFR Part 775.

Company: Nalco Chemical Company  
2901 Butterfield Road  
Oak Brook, IL 60521

Facility Location: 6216 West 66th Place  
Chicago, IL 60638  
EPA ID ILT 180011850

Contact Person: John A. Koszarek  
Environmental Engineer  
(312) 496-5000

The TCDD concentration in the waste materials is not known. According to Dow Chemical Company, the supplier of the trichlorophenol used to manufacture the products, the maximum TCDD concentration in their trichlorophenol is 0.099 parts per million.

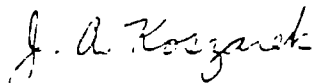
Sixteen of the seventeen drums contain solvent-based products that have flash points between 80°F and 115°F. One drum contains a water-based product that has a pH of 13.

All of the drums are presently stored at this facility in a permitted hazardous waste storage room inside a warehouse. The entire warehouse is protected against fires by a sprinkler system, and the room in which the material is stored is also protected by a high-expansion foam system. The drums are palletized and in a row separated from the adjacent rows by two-foot wide aisles. The drums are inspected weekly to check for signs of deterioration.

REFERENCE EPA FILES  
SITE NAME Nalco Chem  
SITE ID Bedford Park, IL  
WSI 05-11-0212

If you require additional information, please let me know.

Very truly yours,



J. A. Koszarek  
Environmental Engineer

JAK/dw

cc: Regional Administrator  
Environmental Protection Agency  
230 South Dearborn Street  
Chicago, IL 60604

REFERENCE EPA FILES  
SITE NAME Nalco Chem  
SITE ID Bedford Park, IL  
WSI 05-1L-0212





## NALCO CHEMICAL COMPANY

6216 WEST 66TH PLACE • CHICAGO, ILLINOIS 60632 • AREA 312-496-5000

September 29, 1981 - 561

Mr. Larry Longanecker  
Office of Pesticides and Toxic Substances  
U.S. Environmental Protection Agency  
401 M Street, S.W.  
Washington, D.C. 20460

Dear Mr. Longanecker,

Enclosed are copies of the product bulletins and drum labels on the obsolete products containing 2,4,5-trichlorophenol that we intend to dispose of, as you requested by phone on September 25. The number of drums of each product is as follows:

Nalcon 7323	9 drums
322	1
7623	7
	<u>17</u> drums, total

If you require additional information, please let me know.

Very truly yours,

J. A. Koszarek  
Environmental Engineer

JAK/sw

REFERENCE EPA FILES  
SITE NAME Nalco Chem  
SITE ID Bedford Park, IL  
WS1 05-1L-0212



## NALCO CHEMICAL COMPANY

6216 WEST 66TH PLACE • CHICAGO, ILLINOIS 60638 • AREA 312-496-5000

November 20, 1981

Mr. Gordon Olson  
Office of Pesticides and Toxic Substances  
U. S. Environmental Protection Agency  
401 M Street, S.W.  
Washington, D. C. 20460

Dear Mr. Olson:

We have on hand nine 55-gallon drums of an obsolete product containing 9% potassium 2, 4, 5 - trichlorophenate. We have applied to Waste Management, Inc., for approval to dispose of this material at their landfill at Emelle, Alabama (EPA ID ALT000622464). This letter is to notify you of our intent to dispose of the material, as required by 40 CFR Part 775.

Company:	Nalco Chemical Company 2901 Butterfield Road Oak Brook, IL 60521
Facility Location:	6216 West 66th Place Chicago, IL 60638 EPA ID ILT 180011850
Contact Person:	John A. Koszarek Environmental Engineer (312) 496-5000

The TCDD concentration in the waste materials is not known. According to Dow Chemical Company, the supplier of the trichlorophenol used to manufacture the products, the maximum TCDD concentration in their trichlorophenol is 0.099 parts per million.

All of the drums are presently stored at this facility in a permitted hazardous waste storage room inside a warehouse. The entire warehouse is protected against fires by a sprinkler system, and the room in which the material is stored is also protected by a high-expansion foam system. The drums are palletized and in a row separated from the adjacent rows by two-foot wide aisles. The drums are inspected weekly to check for signs of deterioration.

50  
Years of Leadership  
in Chemical  
Technology

REFERENCE EPA FILES  
SITE NAME Nalco Chem  
SITE ID Bedford Park, IL  
WSI 05-IL-0212

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I have enclosed copies of the product bulletin and the drum label. If you require additional information, please let me know.

Very truly yours,

*J. A. Koszarek*

J. A. Koszarek  
Environmental Engineer

JAK/sw  
Encls.

cc: Regional Administrator  
Environmental Protection Agency  
230 South Dearborn Street  
Chicago, IL 60604

REFERENCE *EPA FILES*  
SITE NAME *Nalco Chem*  
SITE ID *Bedford Park, IL*  
WSI 05-IL-0212

# NOTICE OF INSPECTION

Name of Firm

**Nalco Chemical Company**

**Fifth Address**

6216 West 66th Place  
Chicago, IL 60638

Inspector Name and Address

Carolyn S. Hesse, U.S. EPA  
Toxic Materials Branch 5HT-TUB  
230 S. Dearborn St., Chicago, IL 60604

Date \_\_\_\_\_

Time

Inspector's Signature

Name and Title of Recipient

Health Effects Specialist/  
Environmental Scientist

Signature of Recipient

## REASON FOR INSPECTION

Determine compliance with 40 CFR Part 775, Storage and Disposal of Waste Material;  
Prohibition of Disposal of Tetrachlorodibenzo-p-Dioxin  
Under the authority of Section 11 of the Toxic Substances Control Act

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For the purpose of inspecting (including taking samples, photographs, statements, and other inspection activities) an establishment, facility, or other premises in which chemical substances or mixtures or articles containing same are manufactured, processed or stored, or held before or after their distribution in commerce (including records, files, papers, processes, controls, and facilities) and any conveyance being used to transport chemical substances, mixtures, or articles containing same in connection with their distribution in commerce (including records, files, papers, processes, controls and facilities) bearing on whether the requirements of the Act applicable to the chemical substances, mixtures, or articles within or associated with such premises or conveyance have been compiled with.




In addition, this inspection extends to (circle appropriate letters):

(A) Financial data  
(B) Sales data  
(C) Pricing data

(D) Personnel data  
(E) Reserach data


The nature and extent of inspection of such data specified in A through E above as follows:

REFERENCE  
SITE NAME  
SITE ID  
WSI 05-1L-0212

 <b>United States Environmental Protection Agency</b>  <b>TSCA INSPECTION CONFIDENTIALITY NOTICE</b>	<b>Facility</b> Nalco Chemical Company  <b>Facility Address</b> 6216 West 66th Place Chicago, IL 60638
<b>Inspector Name</b> Carolyn S. Hesse  <b>Inspector Address</b> US EPA Toxic Materials Branch SHT-TUB Chicago, IL 60604	<b>Chief Executive Officer of Firm</b> [Signature]  <b>Title</b> Plant Manager
<b>Name of Individual to Whom Notice Given</b> [Signature]	<b>Title</b> Plant Manager
<p>It is possible that EPA will receive public requests for release of the information obtained during inspection of the facility above. Such requests will be handled by EPA in accordance with provisions of the Freedom of Information Act (FOIA), 5 U.S.C. 552; EPA regulations issued thereunder, 40 CFR Part 2; and the Toxic Substances Control Act, Section 14. EPA is required to make inspection data available in response to FOIA requests unless the Administrator of the Agency determines that the data contains information entitled to confidential treatment.</p> <p>Any or all the information collected by EPA during the inspection may be claimed confidential if it relates to trade secrets or commercial or financial matters that you consider to be confidential. If you make claims of confidentiality, EPA will disclose the information only to the extent, and by means of the procedures, set forth in the regulations (cited above) governing EPA's treatment of confidential information. Among other things, the regulations require that EPA notify you in advance of publicly disclosing any information you have claimed and certified confidential.</p> <p><u>To Claim Confidential Information</u></p> <p>To claim information confidential, you must certify that each claimed item meets <u>all</u> of the following criteria:</p> <ol style="list-style-type: none"> <li>1. Your company has taken measures to protect the confidentiality of the information, and it intends to continue to take such measures.</li> <li>2. The information is not, and has not been, reasonably obtainable without your company's consent by other persons (other than governmental bodies) by use of legitimate means (other than discovery based on a showing of special need in a judicial or quasi-judicial proceeding).</li> <li>3. The information is not publicly available elsewhere.</li> <li>4. Disclosure of the information would cause substantial harm to your company's competitive position.</li> </ol> <p>At the completion of the inspection, you will be given a receipt for all documents, samples, and other materials collected. At that time, you may make claims that some or all of the information is confidential and meets the four criteria listed above.</p> <p>If you are not authorized by your company to make confidentiality claims, this notice will be sent by certified mail, along with the receipt for documents, samples, and other materials to the Chief Executive Officer of your firm within two days of this date. The Chief Executive Officer must return a statement specifying any information which should receive confidential treatment.</p> <p>The statement from the Chief Executive Officer should be addressed to:</p> <p>Paul Meriage - Document Control Officer          230 South Dearborn St., Region V          Chicago, Illinois 60604</p> <p>and mailed by registered, return-receipt-requested mail within seven (7) calendar days of receipt of this Notice.</p> <p>Failure by your firm to submit a written request that information be treated as confidential, either at the completion of the inspection or by the Chief Executive Officer within the seven-day period, will be treated by EPA as a waiver by your company of any claims for confidentiality regarding the inspection data.</p>	
<b>To be completed by facility official receiving this notice</b>  I have received and read this Notice.  <b>Name</b> Mr. Eugene Klossok  <b>Title</b> Plant Manager  <b>Signature</b> [Signature]  <b>Date</b> 1/28/82	If there is no one on the premises of the facility who is authorized to make business confidentiality claims for the firm, a copy of this Notice and other inspection materials will be sent to the company's chief executive officer. If there is another company official who should also receive this information, please designate below.  <b>Name</b>  <b>Title</b>  <b>Address</b> 

WSI 05-14-0212

 REFERENCE EPA FILES  
 SITE NAME Nalco Chem  
 SITE ID Bedford Park, IL

 United States Environmental Protection Agency		Name of Firm Nalco Chemical Co.	
RECEIPT FOR SAMPLES AND DOCUMENTS		Firm Address 214 East 11th Street Chicago, IL 60604	
Inspector Name Carolyn S. Hesse		Name of Individual Edgar L. Moody	
Inspector Address U.S. EPA Toxic Materials Branch 5HT-TUB 230 S. Dearborn St. Chicago, IL 60604		Title Environmental Health Officer	
Date Collected 10-26-82	Duplicate Samples Requested and Received ( ) Yes ( ) No	Sample Numbers _____	
The documents and samples of chemical substances and/or mixtures described below were collected in connection with the administration and enforcement of the Toxic Substances Control Act.			
Receipt for the document(s) and/or sample(s) described is hereby acknowledged:			
① Letter dated 1-3-81, from J.A. Roszinek to Gordon Allen, U.S. EPA			
② Letter dated 7-29-81, from J.A. Roszinek to Gordon Allen, U.S. EPA			
③ Letter dated 8-20-81, from J.A. Roszinek to Gordon Allen, U.S. EPA			
<div style="text-align: right;">           REFERENCE EPA FILES            SITE NAME Nalco Chem            SITE ID Bedford Park, IL            WSI 05-12-0212         </div>			
Signature of Inspector Carolyn S. Hesse		Signature of Owner, Operator, or Agent Edgar L. Moody	
Title _____		Title _____	



## NALCO CHEMICAL COMPANY

2901 BUTTERFIELD ROAD • OAK BROOK, ILLINOIS 60521 • AREA 312-887-7500

October 20, 1982

Carolyn S. Hesse  
U. S. EPA  
Toxic Materials Branch 5HT-TUB  
230 S. Dearborn Street  
Chicago, IL 60604

REFERENCE EPA FILES  
SITE NAME Nalco Chem  
SITE ID Bedford Park, IL  
WS1 05-IL-0212

Dear Ms. Hesse:

As we discussed, I am including copies of documents with this letter which describe the final disposition of 900 pounds of the raw material 2, 4, 5 Trichlorophenol (Nalco code R-208) that was reported as being in our inventory in 1980, but not in 1981.

At the end of our interview on Thursday, August 26, 1982, I did not have definite information on the disposition of the raw material.

After the interview, we investigated and did not find any evidence of the raw material being processed into any of our products, however, we did find records indicating that the raw material was sent out from the plant.

The attachments are: copies of a shipping order to return the raw material, a letter requesting invoicing on that raw material, and a check from the firm that received the raw material which verifies that the 1980 inventory was reduced to zero by shipping all 2, 4, 5 Trichlorophenol in our possession to Action Associates.

Based on this information, and the inventory records at our plant, I certify that no production activity involved with 2, 4, 5 Trichlorophenol (Nalco code R-208) occurred in 1980 or later.

Very truly yours,

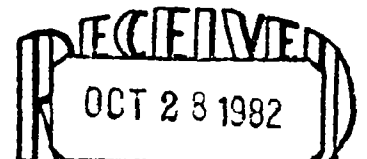
E. L. Moodie  
Process Engineering  
Superintendent

ELM:db  
Attachment

Notary Public

(SEAL) My Commission Expires July 9, 1993

October 26, 1982



TOXIC SUBSTANCES OFFICE  
EPA, REGION V